

## REMARKS

Claims 1-20 are pending in the application. With this amendment, claims 11 and 20 have been cancelled and new claims 21 and 22 have been added. Support for the added claims is found in the original claims and within the specification as filed. Accordingly, no new matter has been added.

The specification has been objected to for containing various typographical and/or informal errors. Pages 8 and 14 have been amended to overcome the objections.

Claim 18 has been rejected under 35 U.S.C. §112, second paragraph for failing to particularly point out and distinctly claim the subject matter of the invention.

Claim 18 has been amended in order refer to claim 15 in order to provide proper antecedent basis for the first distance and the second distance. Removal of this rejection is respectfully requested.

Claims 1-10 have been rejected under 35 U.S.C. §102(b) as being anticipated by Hillestad, U.S. Patent No. 5,542,177. The Examiner states that Hillestad teaches a method for preparing a tube end for a welding operation, including removing a predetermined amount of radial thickness from the outer diameter of a tube.

It is respectfully submitted that the Hillestad reference, the assignee's own prior art, cannot anticipate nor teach or suggest Applicant's claimed invention. Attached hereto is an Affidavit of Fact under 37 CFR §1.132 which states that the Hillestad reference can only teach or suggest removing membrane material between exposed tube ends. Column 2, lines 59-65 states that the method and apparatus for removing membrane material substantially eliminates any possibility of damaging the tube, thereby teaching away from the claimed present invention apparatus and method. The Hillestad milling head cutting blade 38 has an inner radius 46 which is always greater than the outer radius of one of the tubes of the tube wall, see column 5, lines 17-34 and Fig. 2.

Claims 11, 12, 14-18 are rejected 35 U.S.C. §103(a) as being unpatentable over Hillestad, U.S. Patent No. 5,542,177 in view of Carlson et al, U.S. Patent No. 5,211,212. Claims 11, 13, 15, 17, 19 and 20 are rejected under 35 U.S.C. §103(a) as

being unpatentable over Hillestad, U.S. Patent No. 5,542,177 in view of Ueda et al., U.S. Pub. No. 2004/0234349. The Examiner states that the Hillestad reference in combination with either Carlson or Ueda teaches the milling head of the rejected claims.

It is respectfully submitted that the cited references cannot teach or suggest Applicant's claimed milling head as set forth in independent claims 10 and 21 which is adapted to remove an outer radial thickness from an annular tube, wherein the cutting blade includes a countersink or a securing element which connects the blade to the body and extends out from the blades face surface a first distance which is less than or equal to a second distance measured from a lower edge of the securing element head to a lower cutting edge of the blade, respectively. As stated hereinabove and set forth in the attached Affidavit, the Hillestad reference can only teach removing membrane material from between exposed tube ends to facilitate subsequent beveling and/or welding operation. There is no teaching or suggestion for a milling head adapted to remove an outer radial thickness from an annular tube. There is especially no teaching for Applicant's claimed countersink feature or securing element blade connection system which allows machining of the outer diameter of a tube. There is no motivation to combine the Carlson or Ueda references with the Hillestad reference in order to arrive at the Applicant's claimed invention.

The Carlson reference would not be considered by one of ordinary skill in the art to solve Applicant's problem of providing a milling head which can remove tube film from the outer diameter of a tube. Carlson relates to a tree filing saw, which is a part of a feller head connected to a mobile unit which can sever the tree from the trunk and transport the same to a new location for delimbing, see column 1, lines 10-21. The objective Carlson is to provide a cutting tooth that is easily and quickly replaceable when damaged or worn, and also a tooth which is easily and inexpensively manufactured, see column 2, lines 5-14.

Likewise, the Ueda reference merely relates to small-scale indexable inserts of a high-pressure sintered material which can be utilized in tool holders which reportedly provide shortened set up time, improved machining precision, and enhanced mounting

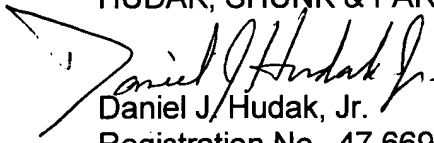
reliability, see Abstract. There is no teaching or suggestion for a milling head configured to remove an outer radial thickness from an annular tube as claimed in association with the additional structure therein. It is respectfully submitted that the cited references can only be modified utilizing impermissible hindsight to arrive at Applicant's claimed invention. There is no motivation, suggestion or teaching of the desirability of formulating the specifically claimed milling head as set forth by the Applicant.

As the cited references fail to teach or suggest the combination of elements recited in the claims, when viewed alone, or in combination, the Applicants respectfully submit that the rejections of the claims under 35 USC §102 and §103 are improper and should be reversed. A Notice of Allowance is earnestly solicited.

Should the Examiner have any questions or concerns regarding this response, a telephone call to the undersigned is greatly appreciated in order to expedite allowance of the application.

Respectfully submitted,

HUDAK, SHUNK & FARINE CO. LPA

  
Daniel J. Hudak, Jr.  
Registration No. 47,669

DJHjr/dp  
2020 Front Street, Suite 307  
Cuyahoga Falls, OH 44221  
(330) 535-2220

Atty Docket: H&S-L